FIFTEENTH ANNUAL COMMENCEMENT

OF THE

MEDICAL DEPARTMENT

OF

GEORGETOWN COLLEGE.

VALEDICTORY ADDRESS

BY SILAS L. LOOMIS, M. D.,

PROFESSOR OF CHEMISTRY AND TOXICOLOGY,

MARCH 2, 1865.

WASHINGTON, D. C.:
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1865.

WASHINGTON, D. C., *March* 2, 1865.

SIR: The students of the Medical Department of Georgetown College, as an evidence of their appreciation of your Valedictory Address delivered this day, respectfully solicit, through their Committee, a copy for publication.

Very respectfully,

FRANK S. WALSH,
SAMUEL A. AMERY,
JOHN C. WATKINS,
J. FRAZER BOUGHTER,
JOS. H. HORNOR,
R. HOWARD,

Committee.

SILAS L. LOOMIS, M. D.,
Professor of Chemistry and Toxicology.

WASHINGTON, D. C., *March* 2, 1865.

GENTLEMEN: The copy of my Address which you request for publication is at your disposal.

Allow me to acknowledge the compliment conferred.

SILAS L. LOOMIS.

Messrs. WALSH, AMERY, WATKINS, BOUGHTER, HORNOR, and HOWARD,
Committee of the Class.

ADDRESS.

Gentlemen of the Class of 1865:

Allow me to congratulate you that the studies introductory to professional life are now closed. The day so long anticipated, when you are to enter the Medical Profession, is now enjoyed. Days, weeks, months, and long years of weary labor are now yielding their fruit. The required curriculum of studies has been passed; the courses of lectures attended; your Theses written, and the final ballot has announced your success.

The honors of Georgetown College—honors not lightly won—are now conferred upon you. The parchment attesting these facts, bearing the broad seal of the College by authority of the United States, and constituting you members of the Medical Profession, is this day placed in your hands. With this diploma is committed also to your care the reputation of the professors under whom you have studied, the honor of the college which now authorizes your graduation, and the confidence of those who are interested in your success. Let your professional ability and integrity command the attention, the respect, and the esteem of your associates; your studious habits and scholarly attainments add lustre to the reputation of your Alma Mater, and the purity of your private life be worthy of imitation.

The responsibilities of the position which you now assume should be well studied. The most endearing and tenderest relations of social and domestic life may be sundered by your ignorance or carelessness, mantling a whole community with sorrow and grief; or by your skill and judgment a life held by the feeblest tenure may be prolonged for years, blessing the family, the friends, the community, and the nation. To you is entrusted the duty of assisting the struggling efforts of nature, as the unfolding germ fully assumes

its vital functions; you are authorized, with anesthesia, and probe, and scalpel, to expose and examine the most vital parts of vigorous manhood; and you are required to nurse the flickering flame of life as it burns low in its worn socket. Let gentleness, tenderness, and all the delicacy of your nature be exhibited when called to the bedside in the former case; let courage, fortitude, energy, decision, and will control, while the knife, bathed in life's warm current, is severing the living fibre; and let kind words, sympathy, and consolation be freely given to those who, having passed a long journey of trouble, and care, and perplexity, are gradually losing their hold on life, and drawing near to the hour which shall release them from their bed of suffering.

Nothing after spiritual aid and support can so illumine the dark and shadowy valley of death as the kindly care of a physician, who, though he knows all his efforts are unavailing, still perseveres till the inexorable conqueror claims its victim.

"*Homines ad deos nulla re proprius accedunt quam salutem homnibus dando.*"

"Men in no way resemble the gods more closely than in giving health to their fellow-men."

But let us examine more particularly the position which the Medical Profession of this age occupy.

With the past we have little to do. Such have been the advances in the analytical and experimental sciences, such the increase of knowledge concerning the human constitution and the nature of remedial action, that whatever may have been the practice of medicine in earlier times, or even down to the beginning of the present century, has lost its primal value and become of no essential interest to us.

The processes of investigation followed by the ancient philosophers, being based on false premises, necessarily gave erroneous results. The general constitution of matter in its grossest condition, to say nothing of its more occult forms, properties, and forces, were then wholly unknown. Matter, when it disappears to the vision, was thought to be *destroyed*, and *growth* was creation. The gods had charge of things terrestrial as well as celestial, and all phenomena not readily explained by some *theory* were referred to the

agency of these higher beings, as prompted by either kind or malevolent sentiments toward man. And thus for centuries theories having as little coherence as wreaths of smoke upturned each other in frequent succession. The human intellect, after thus vaguely groping for ages in the endless maze of theories, at last discerned, that such efforts could never lead to any true scientific results; that the study of nature must begin with the observation of facts; and that "*general laws*" *could only be ascertained by generalizing facts.* Under this, all theories that could not be sustained and verified by experiment were set aside, and thus science was at once relieved of a vast amount of the so-called learned accumulations of ages. Francis Bacon thus became the great instaurator of science.

From this enunciation of Bacon followed a great transition from what might be called the theoretical or speculative period to the experimental. Every theory was now tested by the crucible and the balance, and this led to a fundamental law, "*that ponderable matter was indestructible, and had neither been increased nor diminished since creation.*"

Under this law, whenever matter disappeared by combustion, eremacausis, or by any other cause, its loss must be accounted for. The change manifest was merely that of its form, and the new condition must contain precisely all that had disappeared from the old form. Thus the balance of Lavoisier became the means of correct analyses of ponderable material.

These rigid and inexorable processes of investigation soon changed the whole aspect of the sciences, and by the close of the eighteenth century there was scarcely a single link connecting us with the past. Astrology had become astronomy; alchemy, chemistry; and vague imaginative theories had given place to general laws based on the immutable logic of well-attested fact. Patient, thorough, indefatigable investigators interrogated nature in every part of her far-reaching domain and made record of her responses. Accurate observers, with new and improved appliances, all brought to the common treasury the results of their examinations, till, at length, from these began to unfold the grand

and beautiful laws under which all material, inorganic and organic, has its being.

While the scientists of the age were thus marking out the great foundations on which the future should build, they were as silently and unobservedly undermining the spiritual philosophy of the past. Whole classes of phenomena which but a few years before had been attributed to the special agency of certain divinities, evil as well as good, were now well understood. What could be well explained by the facts of science had little need of divine aid.

It must be remembered that during this second or experimental period, science was based on the doctrine of the *indestructibility of ponderable material* and on the *supposed unlimited, indefinite amount of force* acting in various forms upon and within it. Force held the same position in this period as ponderable matter had in the speculative age, it being supposed to be capable of creation or annihilation at will.

Whenever a force ceased to act in a particular direction it was believed to be destroyed In fact, all ideas in regard to force were exceedingly vague and indefinite. Its true nature was not known. It was considered beyond our reach, and those who attempted to examine it were ridiculed as speculative, unpractical, and visionary men, not entitled to the rank of the learned and the sagacious.

As careful and accurate investigations of ponderable matter were pushed forward, certain exceptional phenomena presented themselves, which could not be explained. This class of phenomena accumulated to such a degree that the scientists of the age were compelled to direct their attention more especially to the imponderable agents, as they were called, commonly known as heat, light, electricity, magnetism, and vital force.

The investigation of heat, as one result, gave the various applications of steam; the study of light gave us the various branches of photography; the study of electricity resulted in the electrotype, and magnetism gave us the telegraph.

The study of vital force has not been fruitful of results, from the fact that it has barely commenced.

And precisely as it was in the speculative age, there is a class of phenomena arising from some or *all* of these *forces, principally from vitality*, which *is not yet explained or understood.* It is not assuming too much to say that the most important results are to follow these investigations of imponderable material or *force.* At the present time we can have no correct idea of the vast changes in social, civil, intellectual, and moral life which these researches in science must inevitably produce.

The greatest realm of human capabilities remains yet unexplored.

It is now generally admitted that the great law of matter, *that force is indestructible and convertible*, "constitutes the most important discovery of the present century."

It compels scientists to review all their previous investigations, and essentially modifies their views of the "general constitution of matter."

Having thus sketched the position of science at the present time, on which our whole system of medicine must rest, our inquiry now is plain, definite, and pointed, viz: What have medical men to do in the premises?

This question is readily answered.

The medical profession is ready at all times to advance with the scientists of the age, and large numbers of the most learned and successful investigators of both ancient and modern times have been found in its ranks.

We are ready, the moment a new truth is announced or a new discovery made, to appropriate it, if possible, for the benefit of man. In fact, every material that has come within the reach of scientific investigation has been carefully and thoroughly examined and tested by the medical profession, and such qualities and properties as could be made available for use have been seized upon as remedial agents; and as new discoveries are daily made, "The School of Medicine" is constantly advancing. It has kept pace with the vast strides that science has made in the last few years, and will continue to advance as a necessity of its existence.

I say "The School of Medicine," from the fact that there is no other school of medicine.

Without descending to notice the claims of all or any of the pretended schools of medicine, their place will be readily seen when we properly appreciate the position which the "Old School of Medicine" has ever held.

The "Old School of Medicine" includes the educated men of every age; men whose studies ceased only when life ended; active, energetic, persevering men; bringing their profession up to their own time, and pushing their investigations into the future for the benefit of the race; philanthropic, self-sacrificing and devoted; enduring famine and facing unflinchingly all the hideous forms of pestilence;—men of honor, of integrity, of worth, esteemed, revered, and loved. Such men the School of Medicine claims by thousands in every age.

The Old School of Medicine includes all of the elements of growth and expansion. It is based on the immutable logic of facts, not of theories, and every newly discovered fact is its legitimate property. It must, therefore, expand in every direction wherever investigation reaches, and whenever a new law is deduced the medical profession is among the first to test its worth.

The Old School of Medicine contains in its archives the scientific record of the past. It has taken ages to gather up the present practice of medicine, and the recorded observations of the ablest men the world has produced are invaluable for all time. They cannot be set aside.

The Old School pursues that happy medium which has ever been acknowledged as productive of the highest benefits to the human race.

It does not propose to cure everything by electricity.

It does not propose to do the same by the means of water.

It does not propose to cure all the "ills that flesh is heir to" by infinitesimal doses.

It does not propose to cure by taps, moves, and passes.

Neither does it propose to secure the services of disembodied spirits.

Nor does it propose to use any one method or material as its main reliance.

But it does propose, by a careful and thorough knowledge

of all material, to select from its extensive list of remedial agents such as are indicated by the pathological condition of the patient, and by their judicious application assist nature in the restoration of health.

The importance of your position as a member of this profession is equally seen when we look at the object of your professional skill and attention.

We find matter in its lowest or elementary form endowed with certain properties. As it increases in complexity, we find more and more force atoms in proportion to the gross matter. Continuing to ascend in the scale of existence, we find certain complex atoms exhibiting new properties, especially that of reproducing itself, and this new power is called vegetative life.

This new class of organic bodies may exhibit all the properties which are attached to inorganic material, and, in addition thereto, a power not found in inorganic material, by which all vegetable substances are built up after certain types. It seems to be the peculiar province of vegetable life to build up material from inorganic sources preparatory to its being used in a higher plane of existence, and, in doing this, the process consists chiefly in attaching to gross matter a much greater amount of force than it possesses in its inorganic condition. Matter is elevated to a higher plane of existence in passing from the inorganic to the vegetable world.

On the next plane, that of animated existence, we find an entire new development, commonly called vital force or life, and this, as in the case of vegetable, is an added power. Animated existences may exhibit any one or all of these properties of matter, viz: chemical force, heat, light, electricity, magnetism, motion, and vegetative force, and, in addition thereto, vital force or life.

It seems to be the special province of this vital power to elevate and sustain, temporarily, a portion of vegetable material to the plane of animated existence by concentrating all the forces of a given amount of material on the specific portion to be elevated, thereby depriving the balance of its accumulated force, or, in other words, letting it down to its inorganic condition.

We thus find two planes of organic existence below man, and from which he draws all the material of growth and development, and when it is remembered that food for human existence consists, necessarily, of force and ponderable material, we find a remarkable difference in the supplies of nutriment obtained from those two sources, viz: that all the vegetable organisms decay or go back to the first or elemental plane of existence much more slowly than do the animal, and hence the supply of life from vegetable productions must be quite feeble compared with that obtained from the rapid decay of animated existence.

The great mass of vegetation is, therefore, not suitable for the nutriment of man. In fact, almost all food from the vegetable world adapted to the nature of man is confined to seeds and fruits. These are constituted under such laws as to facilitate their decomposition and induce a rapid return to the elemental form, for the purpose of yielding the necessary force for germination.

It is also a well-known fact that the forces bound up in seeds and fruits are in much greater proportion to the gross matter than in any other part of vegetable organizations, and therefore approach much nearer to animated existence, in this respect, than any other form of matter.

On the other hand, while the great mass of animated existence is adapted to the sustenance of man, it is a well ascertained fact that meats contain more force than any other material, and hence when they break down, by digestion or any other process, it is with rapidity and with the liberation of a great amount of force.

The question of nutrition has been hitherto investigated only so far as ponderable material is concerned, and so far as determinations could be verified by weight. From these data we find that about 30 per cent. of the food of man is obtained from the animated plane of existence, and the residue, 70 per cent., from the vegetable.

But the question of nutrition cannot be determined by weight alone. *Force is requisite* as well as gross material, and the problem now to be solved is *to determine the amount of*

force in each article of diet and its adaptation to the assimilating processes of the human system.

We have not only the histogenetic and calorifacient products of digestion, but in the breaking down of all that material in the prima via, which can never be taken up by the system, we have a *constant liberation of force, which is assimilated under some of the various forms of vitality*, and is as essential to the development of the organism as chyle.

Again reverting to the gradual development of matter, we find that whenever the quantity of force increases more rapidly than the gross material in the constitution of a body it is elevated in the scale of existence; that the elevation of the vegetable plane is solely dependent on its accumulated constituent forces; and that the higher elevation of seeds and fruits, constituting them food for man, is due to the increased force wrapped up in their constitution; that from this same cause animated existences rank far above the vegetable plane, thereby constituting them almost exclusively the required food for man. Now, these facts, together with the fact that man only uses for food seeds, fruits, and meats, substances containing the greatest concentration of imponderable material which may be readily and steadily développed by digestion, form a sufficient basis for a reasonable expectation that a higher form of force will be developed by the human being than has been exhibited by any other organization.

And more: knowing that man assimilates in his growth and functional activity only the highest projections of vegetable and animal existences, thereby wrapping within his constitution the highest and tensest forces of nature, we are unavoidably driven to the conclusion *that man must develop force in some of its more elevated conditions.*

The organization of animals of the lower order will not answer these new demands. This intense concentration of power must beget new modes, new energies, new exhibitions in some form. Hence we find in man entire classes of powers beyond those of any other terrestrial being. Hence the grand reaches of intellect, of memory, and of imagination. He walks up and down the universe, amid the stars, and

back through the darkness toward the beginning. He puts all but the living spirit on the canvas, or creates it from the marble. He possesses the requisites for receiving and developing powers that carry him over every part of the globe on which he lives, and makes every particle of its matter and every living being that abides upon it, subservient to his will.

Man, presented in this view, is truly "fearfully and wonderfully made." But how expressive these terms become when we look at him in the infinite variety of pathological conditions which may be presented!

And especially to you will he become an object of intense interest when, compelled by disease, he turns, in pain and anguish, but with confidence in your ability to relieve, and implores your services. You will then fully appreciate the responsibility resting upon you which, before this public audience, you have expressed your readiness to assume.

You have placed within your reach all that science, in its most exalted conditions, has attained to. You have, in the medical works and journals of the present day, all the accumulated surgical, medical, and therapeutical knowledge that the ablest men have been enabled to gather up. And more: you now take your place in the medical profession, and it demands at your hands some increment of progress.

Language fails to express the opprobrium and contempt which should follow every man who presumes to take in charge the health and lives of his fellow-men when he is indifferently prepared for his position.

In conclusion, gentlemen, there are one or two points not strictly within the limits of professional life, that nevertheless exercise so important an influence upon the success and reputation of the young candidate for public favor as to merit a few closing words.

In a country established upon the suffrages of the people, every intelligent citizen must charge himself with a knowledge of the public weal. He is inexcusable in leaving it to others. But there is a broad line of distinction between the patriot and the politician, which a servant of the public must never forget, and over which the eminent in science seldom step. The physician that locates himself in the midst of a

quiet, peace-loving community, stands as a minister of health to all its members. What their personal opinions and circumstances may be are naught to him. Nor should his opinions be aught to them. It is often claimed that the physician ought, like the clergyman, to be a reformer, and the more impetuous and unreflecting sometimes impugn the motives and question the character of the physician who wisely regards himself, as to a large extent, the common property of all those who have made him welcome to their neighborhood. He is the one to whom all eyes turn in hours of distress. He, who is to stand as the minister of consolation to the sick man, should be no violent opponent, no bitter antagonist, bearing in his bosom the pent hatred of fierce and unscrupulous campaigns. He should come with a reputation for candor and self-possession that will assure every one who may need his care, of his sympathy and kind feeling.

You must never forget that the moment this frail tenement yields to disease the mind suffers alike with it. Every patient you may visit should welcome you as a friend, either from the sentiment of friendship arising from what may be seen of your worth or from what has been heard. How impossible it will be for you to do this if you have made yourself a violent partisan, even in a good cause, I need hardly remark.

And if these general principles should be observed with respect to social and political questions, it will readily be inferred they must apply with still greater force to questions of a religious nature. It may be supposed that every intelligent individual has some well-formed notions as to his religious obligations; and these, whatever they may be, are often deemed by him as among the most important of all his earthly possessions. With these the physician, in the hour when the patient can least afford to meet any disturbing cause, is peculiarly liable to come in contact. How unfitted to such an hour and responsibilities is one whose heart is filled with narrow bigotry and sectarian intolerance. With calm serenity, with hopeful trust, ought he to lead along the margin of life those who have trusted him as their best, truest friend. While it may be the high privilege of the

physician, at such an hour, when he sees that hope has fled, and that but a few more grains of sand are yet to drop in the hour-glass of life, to bid the sufferer look above, to put his trust in a higher power, and bid adieu to earth, it is neither the time nor the occasion, nor is it the prerogative of the physician, to disturb the religious sentiments of the dying man by endeavoring to impress convictions which he may believe to be better and truer. This is not his province. It has been wisely placed in other hands. It is his to afford consolation, from whatever source it may be drawn, but not his to attempt instruction.

And, lastly, to no one in the whole community is there confided so much of life, reputation, and character as, from the necessities of the case, there is and must be to the physician. From him there can be no concealments. Whatever man may keep in his own heart, untold to friend or confessor, must oft times be confided to the physician. The happiness, the good name of individuals and families—all that is dear in social life is often confided to his keeping. They will confide in you because of your profession, and because you have been deemed worthy to assume its responsibilities.

You must never forget, under however pressing circumstances, what has been so placed under the guardianship of your sacred honor. You may be importuned by friends, and waylaid by enemies, but whatever the appeal or the proffered advantage, you must ever remember that to the high-minded and upright, there can be no departure from this rule of the profession without dishonor.

In conferring these diplomas, the College relies upon your elevated sense of honor and integrity for the high and unimpeachable discharge of these responsible trusts. You are not charged with the supervision of the mode of life men lead, but with the solemn duty of restoring health whenever it lies in your power.

As in the earlier times the art of healing was believed to be divine, so in these Christian times you are to dispense your benefactions even as the common Father of us all, sending His blessings upon the evil and the good, and His rain upon the just and the unjust.

MEDICAL DEPARTMENT

OF

GEORGETOWN COLLEGE.

FIFTEENTH ANNUAL COURSE, 1864—'65.

The number of matriculants for the session was 84. At a public commencement, held in Ford's Theatre, 10th street, on Thursday, March 2, the degree of Doctor of Medicine was conferred upon the following:

Adams, E. A	D. C	Variola.
Bitting, Louis C	Penna	Gunshot wounds.
Boswell, E. V. B	Md	Nervous Sedatives.
Brooks, J. Henry	"	Morbus Coxarius.
Brownlow, J. H	Canada	Strychnia.
Collins, William T	Minn	Primary Amputations.
Cummings, George W	"	Miasmata and their consequences.
Dulin, Edgar A	D. C	Typhoid.
Duvall, William T. S	"	Rheumatism.
France, J. M. Duncan	"	Menstruation.
Haven, Charles L	Maine	Diagnosis.
Harroun, W. S	Mich	Pyæmia.
Husselton, William S	Penna	Continued Fever—Typhoid type.
Hyatt, P. F	"	Malignant or Spotted Fever.
Munger, M. J	N. Y	Typhoid Fever.
Rex, Thomas A	Penna	Some of the Salts of Iron.
Steinmetz, William R	Prussia	Scorbutus.
Tibbals, W. F	Ohio	Collitis.
Wiggin, Augustus W	N. H	Excision of Joints.
Wood, George F	Mass	Pyæmia.

JUNIORS.

Amery, Samuel A	Md.
Abel, J. W	Penna.
Alexander, W. O	D. C.
Barnes, Joseph D	Penna.
Bell, Ralph	D. C.
Behrend, Adaja	N. Y.
Bond, Samuel S	Penna.
Boughter, J. Frazer	"
Brown, C. F	Conn.
Brown, W. R	D. C.
Buck, L. A	"
Burchard, W. M	Conn.
Caldwell, George H	Mass.
Carey, George	Maine.
Choat, Rufus	D. C.
Cooper, L. E	"
Dooly, Frank	"
Dorr, L. L	Mass.
Duckett, W. G	D. C.
Dunning, Czar	N. Y.
Downing, J. W	
Eastman, Joseph A	N. J.
Free, C. W	D. C.
French, Charles P	Mass.
Fuller, George E	"
Hale, William	D. C.
Henry, J. N	"
Hornor, Joseph H	N. J.
Howard, Robert	D. C.
Huntington, J. L. W	Conn.
Johnson, Joseph T	Mass.
Jones, E. S	Penna.
Julihn, M. L	La.
Kearney, R. F	D. C.
Lee, Chapman	"
Lewis, A	Vt.
Marble, John O	Maine.
Moore, John	N. J.
Morrill, C. P	Maine.
Miller, John S	D. C.
Nicodemus, W. J. S	"
Norcross, George J	N. H.
Orton, D. S	"
Parkhurst, C. B	Conn.
Pickett, G. H	Cal.
Ragan, G. T	Ind.
Ranterburg, L. E	R. I.
Royse, Chase	N. Y.
Southron, T. J	Md.
Tonnor, George	Minn.
Thompson, G. S	D. C.
Trott, Thomas H	"
Vaughan, W. E	Minn.
Wilmarth, Frank	Mass.
Walsh, Frank S	D. C.
Ward, S. R	"
Ware, Edward	N. J.
Watkins, John C	Mass.
Wells, George R	Ill.
Winants, J. C	D. C.
Wise, Thomas	"
White, Columbus	"
Whitley, W. H	N. J.
Wood, E. N	N. Y.

MEDICAL DEPARTMENT.

OF

GEORGETOWN COLLEGE,

WASHINGTON CITY, D. C.

(No. 303 F, near 12th street.)

SUMMER COURSE, 1865.

Faculty.

NOBLE YOUNG, M. D., PRESIDENT,
Professor of Principles and Practice of Medicine.

FLODOARDO HOWARD, M. D., TREASURER,
Professor of Obstetrics and Diseases of Women and Children.

JOHNSON ELIOT, M. D., DEAN,
Professor of Principles and Practice of Surgery.

JAMES E. MORGAN, M. D., *Professor of Materia Medica and Therapeutics.*

THOMAS ANTISELL, M. D.,
Professor of Military Surgery, Physiology, and Hygiene.

MONTGOMERY JOHNS, M. D.,
Professor of General, Microscopic, and Descriptive Anatomy.

SILAS L. LOOMIS, M. D., *Professor of Chemistry and Toxicology.*

WARWICK EVANS, M. D., *Demonstrator of Anatomy.*

The Session will commence on the 13th of March, and terminate in July.

The fees for the Course of Lectures	$105 00
Matriculation fee (paid only once)	5 00
Demonstrator's fee	10 00
Graduation fee	30 00
Single ticket	15 00

For further information, address

JOHNSON ELIOT, M. D.,
DEAN OF THE FACULTY,
No. 408 F street, Washington, D. C.